Hello All -

This is an email to update interested parties on NOAA SEARCH Observatory Activities as of March 10 2004. We have started a website at:
http://www.etl.noaa.gov/programs/search/

which has some general information. Eventually I hope to keep this site updated with latest news and information, but for now, this email will serve as our newsletter.

EUREKA AND ALERT SITE CONSIDERATIONS
Both sites offer excellent infrastructure in terms of buildings, power, telecommunications and have workable transportation and housing options. At present, it appears that Alert has an "official" policy of only allowing Canadian civilians on base. It has been indicated that "unofficial" policy has been, and will likely continue to be, much less restrictive, especially for US citizens. However, it appears that access will be limited/unavailable for citizens and former citizens of any Sino-Soviet, Warsaw pact or current "unfriendly" nations.

Alert and Eureka both offer different opportunities for science, some of these science issues have been discussed in the site survey report (available on request). The GAW station in Alert is a tremendous asset, and an arrangement that would cost share technician time between NOAA and MSC at Alert is very attractive. At the same time, the Eureka Astrolab is a state-of-the-art facility, and operations at Eureka offer important opportunities for collaboration with the CANDAC program and Canadian Space Agency CloudSAT activities.

At this point, it is my plan to go ahead with arrangements to deploy a radiation suite and some aerosol instruments at Alert as planned during a January 11-12 meeting in Boulder between NOAA (Taneil Uttal, Bob Stone) and MSC (Andrew Platt, Bruce McArthur) and others. However, since it is also in the interests of the NOAA SEARCH program to eventually establish an observatory in Siberia (negotiations have already commenced with Rosydromet, the Russian Weather Service), it seems that having a site that is open to scientists of all nationalities is critical. Therefore, I anticipate that deployment of the active remote sensors (radar and lidar), scanning radiometers, and flux measurements will be directed towards Eureka. Eventually, it would optimum to duplicate the Alert radiation and aerosol measurements in Eureka to provide a basis for on-going comparisons between sites.

AEROSOL NEWS
NOAA has purchased a condensation particle counter and a data acquisition system is currently (March, 2004) being deployed in Alert along with a new MSC integrating nephelometer. These instruments will complement existing measurements by the MSC aethalometer, and a particle/soot photometer. In August of 2004 there are plans for deploying an impactor system for delivering size segregated samples to the aerosol samplers. The impactor system will be shared MSC and NOAA undertaking. These very coordinated efforts have been undertaken by Richard Leaitch (MSC/ARQM) and John

Ogren (NOAA/CMDL).

RADIATION NEWS
A suite of broad-band radiation sensors has been purchased and is presently being assembled by NOAA/CMDL. MSC is supporting these efforts and providing concrete pads and footings in Alert to facilitate deployment in August 2004. There were some issues to sort out since the Canadian BSRN program and NOAA/CMDL have somewhat different operation protocols for these kinds of instruments. It appears that a satisfactory compromise has been reached that succeeds in facilitating both NOAA/SEARCH and MSC/BSRN objectives. Coordination of this activity under the supervision of Bob Stone (NOAA/CMDL), Bruce McArthur (AES).

CLOUD RADAR NEWS
An upgraded processing system is being installed in the cloud radar. It is likely that because of programmatic commitments on NOAA research vessels that the radar will not be available for deployment until the summer of 2005. Deployment of the radar in Eureka in the summer of 2004 is still a possibility, and avenues are being investigated to facilitate this goal.

CLOUD-AEROSOL LIDAR NEWS

The University of Wisconsin Arctic lidar is completed and operating well, however a deployment proposal to NSF has been recently declined. The NOAA/SEARCH Observatory program is evaluating budgets to determine how much of lidar deployment can be supported through Observatory funding.

GROUND-BASED SCANNING RADIOMETER
A prototype multi-channel scanning radiometer is being tested (March 10 April 2) in Barrow. Purchasing of parts for a dedicated SEARCH radiometer is in progress.

CURRENT DEPLOYMENT SCHEDULE
Radiation sensors - August of 2004 in Alert
Condensation particle counter - March 2004 in Alert
Impactor system - August 2004 in Alert
Cloud Radar - August of 2004 or 2005 in Eureka
Aerosol/Cloud Lidar - August of 2004 or 2004 in Eureka
Flux Instruments - August of 2005 in Eureka
Ground-Based Scanning Radiometer in Eureka - August of 2006
2nd Radiation Suite in Eureka - August of 2006

NEWS FROM CANDAC
Jim Drummond (University of Toronto) just received the great news that the capital equipment portion of the CANDAC program has been funded. The next step will be to secure long-term operational funding. NOAA/SEARCH and CANDAC will be carefully considering how to best leverage off the joint programs to come up with a robust Atmospheric Observatory in NE Canada.

INPUT WELCOMED
As always, any thoughts, comments, suggestions, are welcome. I will be contacting several folks individually on a number of details.

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